Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:
2007 Joint Airborne Lidar Bathymetry Technical Center of Expertise (JALBTCX) Topobathy Lidar: Guam

1.2. Summary description of the data:
These data were collected for the Government of Guam Department of Public Works and the Government of Guam Office of Homeland

Security from February 18 through May 20, 2007. The data contained in these files contain topographic data collected by the CHARTS

system. The data points representing bare earth have been classified as such using TerraScan. The topographic lidar was collected

across the island of Guam to produce 2 foot contours and bathymetric lidar was collected to fill the areas where no data were

obtained during previous survey efforts. The bathymetric lidar data were collected from the land/water interface seaward to a

depth of 40 meters or laser extinction, whichever came first. This is a classified data set. Classification values are:

Class 1: Unclassified

Class 2: Ground

Class 11: Bathymetric points

Class 14: upland collected bathymetric points (green topo)

The data contain both first and last return lidar data. The topographic lidar data are vertically referenced to Mean Sea Level (MSL)

and the bathymetric lidar data are referenced to Mean Lower Low Water (MLLW).

1.3. Is this a one-time data collection, or an ongoing series of measurements?
One-time data collection

1.4. Actual or planned temporal coverage of the data:
2007-02-18 to 2007-05-20

1.5. Actual or planned geographic coverage of the data:
W: 144.616616, E: 144.962572, N: 13.654497, S: 13.229483

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
coastal.info@noaa.gov

2.5. Phone number:
(843) 740-1202

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality
NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible
(describe or provide URL of description):

Process Steps:

- 2007-11-14 00:00:00 - These data were collected using the CHARTS system. It is owned by the Naval Oceanographic Office and Operated through contract. The system collects topographic lidar data at 20 kHz and hydrographic data at 3 kHz. The system also collects RGB imagery at 1Hz. A CASI-1500 hyperspectral line scanner is integrated with the system as well. Aircraft position, velocity and acceleration information are collected through a combination of Novatel and POS A/V equipment. Raw data are collected and transferred to the office for downloading and processing in SHOALS GCS software. GPS data are processed using POSPac software and the results are combined with the lidar data to produce 3-D positions for each lidar shot. These data are edited using Fledermaus software where anomalous data are removed from the dataset. The edited data are written to the national grid system 1 km tiles using chartsLAS, a program written by NAVO. This program reads data from the original binary format files and produces separate ASCII files for first and last return data. Using a model calculated by NAVO, data were converted from ellipsoid to Mean Sea Level heights using the program datum_shift, written by NAVO. The LAS files output from chartsLAS were read into TerraScan and filters were applied to classify ground points. Points designated as ground are assigned a classification value "2" and all other points are assigned the classification value "1" which represents an unclassified state.
- 2014-08-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received files in LAS format. The files contained LiDAR intensity and elevation measurements. OCM performed the following processing on the data for storage and provisioning purposes within Digital Coast: 1. The data were converted from UTM coordinates to geographic coordinates. 2. The bathymetric lidar classifications were set to class 11. 3. The LAS georeference header files were set to reflect the tidal vertical datums. 4. The LAS header fields were sorted by latitude and updated. 5. OCM exported the laz files to contours, converting into a polygon shapefile. OCM then used this polygon as a sea and land interface, classifying upland class 11 (

bathymetric points) to class 14 (Green Topo, upland topography collected with the green laser which collected class 11); the sensor used to collect bathymetric lidar also collects topography upland but the newest classification shows the inaccurately mapped upland topography as class 14 points.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?
No

6.1.1. If metadata are non-existent or non-compliant, please explain:
Missing/invalid information:
- 1.6. Type(s) of data
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:
NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/50065

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:
NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:
https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=551
https://coast.noaa.gov/htdata/lidar1_z/msl/data/551

7.3. Data access methods or services offered:
This data can be obtained on-line at the following URL: https://coast.noaa.gov/dataviewer;

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection
The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

> **8.1. Actual or planned long-term data archive location:**
> *(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

> > **8.1.1. If World Data Center or Other, specify:**

> > **8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

> **8.2. Data storage facility prior to being sent to an archive facility (if any):**
> > Office for Coastal Management - Charleston, SC

> **8.3. Approximate delay between data collection and submission to an archive facility:**

> **8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**
> *Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

9. Additional Line Office or Staff Office Questions
Line and Staff Offices may extend this template by inserting additional questions in this section.